

R E M A R K S

The drawing has been objected to because of an error. The error is corrected in the enclosed amended sheet 8, and the approval of the Examiner is hereby requested. A marked-up copy is enclosed as well.

Claims 2, 3, and 19 were objected to, and the Examiner has kindly suggested the changes that would make the claims allowable. The amendments are made herein and, consequently, applicants believe that the claims are now allowable.

Claim 13 was rejected under 35 USC 102 in view of Marchetto et al, US Patent 5,914,959. Applicants respectfully traverse.

In the previous Office action response applicants have asserted that Marchetto et al do not teach claim 13 method because the various thresholds are found in a look-up table (LUT). In the instant Action, the Examiner maintains the rejection, but seems to be in agreement with applicants that the receiver stores a look-up table listing the acceptable threshold values for each available constellation bit rate. The Examiner then states "One of ordinary skill in the art would recognize that for each mode, knowledge of the performance of the channel relative to varying communication parameter must be obtained in order to determine the mode's threshold," and follows up with a pointing to a Parantainen et al reference (International Publication WO/98/31177) as an example. This, of course, is an obviousness assertion; not an anticipation assertion. Stated in other words, the Examiner's assertion appears to *ipso facto* fail to support the Examiner's rejection under 35 USC 102.

The Examiner also states that "it is inherent that the threshold values stored in the LUT are calculated based on a performance criteria function using at least one parameter." Applicants respectfully disagree. There is nothing in the Marchetto et al reference, or in the numbers contained in the LUT, or in the knowledge of those who are skilled in the art that would force a parametric relationship on the method for deriving the numbers that are placed in the LUT. Hence, there is nothing "inherent" between the number and the method for deriving the numbers. To illustrate, the LUT values in Marchetto et al might have been developed through exhaustive field tests that, through sheer weight of data, provided to Marchetto et al the numbers to be placed in the LUT.

The Examiner, however, points to the Parantainen et al reference, and asserts that it describes that a mathematical relationship exists between interference threshold and signal quality value.

It appears that the Examiner's position is one of a 35 USC 103 rejection under Marchetto et al in view of Parantainen et al, and not one of a 35 USC 102 rejection.

In applicants' view, however, even such a rejection cannot be sustained. Even if the Examiner is correct that Parantainen et al describe that a mathematical relationship exists between interference threshold and signal quality value, it remains that the Examiner must at least assert a correspondence between **some particular function that is taught** in Parantainen et al, and the function specified in claim 13. The Examiner points to lines 26-29 of page 5 in the Parantainen et al reference, but those lines state:

Decision on which quality value of served radio connections correlates to which interference threshold of the channel 400. This means that it is indicated in some specific form, for instance, as a table or a mathematical formula, which quality value correlates to which interference threshold.

Clearly, those lines do not teach ANY particular function, and in fact, do not even assert that such a function definitely exists.

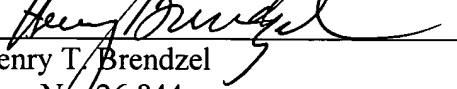
In contradistinction, claim 13 not only specifies a function that is based on a parameter (in the first step), but one that also specifies (in the second step) that "for each of the at least one link adaptation modes, determining a range of signal quality values for which **the performance criteria function is maximized**" (emphasis supplied). As indicated above, the combination of Marchetto et al and Parantainen et al does not really teach the use of **any** function, and clearly, there is nothing in the combination to suggest the second step of claim 13; i.e. maximizing that function. Therefore, it is respectfully submitted that claim 13 is not anticipated by Marchetto et al, and is also not made obvious by Marchetto et al and Parantainen et al, taken singly, or in combination.

Claims 14 and 15, which depend on claim 13, were rejected under 35 USC 103 as unpatentable under Marchetto et al in view of Parantainen et al International Publication WO/98/31177. Applicants respectfully traverse, pointing to (and adopting) the above remarks regarding claim 13.

In view of the above amendments are remarks applicants respectfully submit that all of the Examiner's objections and rejections have been overcome. Reconsideration and allowance are, therefore, respectfully solicited.

Dated: _____

Respectfully,
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Appendix – Marked Up Version showing Changes Made

IN THE CLAIMS:

2. (Currently Amended) The method according to claim 1, wherein the step of determining a threshold value corresponding to each of at least one link adaptation modes further includes the steps of for each [retransmission] adaptation mode, determining a corresponding throughput function using at least a radio interference rate value and a block error rate value.

19. (Currently Amended) A wireless communication system comprising:

at least one wireless receiver, wherein each of the at least one wireless receiver further includes:

a transceiver;

an antenna;

at least one wireless transmitter, wherein each of the at least one wireless transmitter further includes:

a transceiver;

an antenna;

a processor, wherein the processor is adapted to:

- (a) determine whether a signal quality value for a current receiver is less than a no-transmission threshold;
- (b) if the signal quality value is less than the no-transmission threshold, cease transmission to the current receiver; and
- (d) if the signal quality value exceeds the no-transmission threshold, perform link adaptation in accordance with an algorithm that takes into account diminution [is] in signal to interference ratio due to retransmissions.